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I, LEANNE MYNOTT, MANAGER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2003902995 for a patent by LANCE EDWARD DUKE as filed on 13 June 2003.



WITNESS my hand this
Twenty-fourth day of June 2004

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SURFBOARD STORAGE COMPARTMENT

Field of Invention

The present invention relates to storage compartments and, in particular, to a storage compartment mounted in a surfboard or the like for providing a watertight storage of objects placed within the compartment.

Background of the Invention

When participating in surfing and other water sports, the surfer does not generally carry on his person his car keys, which often include electronic components, and other valuables into the surf due to possible loss or damage thereof. It is often the case that the surfer leaves these car keys and valuables on the shore which makes them vulnerable to theft.

There have been previous attempts to devise storage containers adapted to be mounted on surfboards or the like, however, none of these devices have been easily installed and of a size where they are unobtrusive. There has also been the problem with regard to the seal provided.

Object of Invention

It is therefore an object of the present invention to provide a storage compartment suitable for mounting in a surfboard or the like for storing objects therein.

Disclosure of Invention

According to one aspect of the present invention, there is disclosed a storage compartment apparatus for mounting in a surfboard or the like for storing articles therein, said apparatus including a cylindrical housing having a closed end and an open end, a cylindrical lid having a closed end and cylindrical skirt depending therefrom for engagement with open end of said housing, grasping means located on the outer surface of said cylindrical lid to enable the user to grasp said cylindrical lid, wherein said cylindrical housing has a protrusion extending therefrom in a lateral direction, said protrusion being adapted to receive elongate articles such as keys or the like.

Preferably the elongate protrusion is substantially rectangular in cross-section.
Naturally, the shape can be rounded at its edges.

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In a preferred form, the open end of the cylindrical housing has a pair of opposed flanges spaced apart in which the skirt of the cylindrical lid is received. Preferably, the flanges have retaining ribs protruding therefrom which engage with a corresponding slot on the depending skirt.

- 5 In the preferred form, the inner flange has as its outside surface a rubberised type gasket with the ribs therein.

Brief Descriptions of the Drawings

One embodiment of the present invention will now be described with reference to the accompanying drawings.

- 10 Fig. 1 is a perspective view of the storage compartment apparatus of a preferred embodiment.
Fig 2 is a perspective view of the storage compartment apparatus with the lid off and a key shown as being inside.
Fig 3 is a exploded perspective view of the storage compartment apparatus of Fig 1.
- 15 Fig 4 is a partial cut-away view of the storage compartment apparatus of Fig 1.
Fig 5 is an exploded perspective view of the storage compartment apparatus of Fig 1 showing the underside thereof.
Fig 6 is a perspective view of a surfboard with the storage compartment apparatus of Fig 1 in position.
- 20 Fig 7 is a cutaway side view of the storage compartment apparatus of Fig 1 shown in the surfboard.
Fig 8 is a side view of a holesaw apparatus which is used to install the apparatus of Fig 1 into the surfboard, and

Fig 9 is a perspective view of a cutting implement of the holesaw device of Fig 8.

25 Best Mode of Carrying Out the Invention

The storage compartment apparatus 10 of a preferred embodiment is preferably insertable into a surfboard 11 as seen in Figs 6 and 7. The apparatus 10 is adapted to be used to receive valuables, such as keys and the like, in order that they are safe from theft.

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The apparatus 10 includes a cylindrical body 12 with a protrusion 13 extending therefrom. A cylindrical lid 14 is used to seal the apparatus 10.

The body 12 of the apparatus 10 is generally cylindrical and has a closed end 15 and then open end 16. The closed end 15 preferably has serrated ridges 17 on its lower surface to bite into the foam of the surfboard 11 when it is being inserted. The open end 16 has a pair of upstanding flanges 18 which engage with a depending skirt 20 of the lid 14. The flanges 18 and 19 have helical ribs 21 extending inwardly towards each other whereas the ribs 22 on the flange 19 are formed of a rubberised plastic material which assists in the provision of a seal against a helical slot 23 located in the depending skirt 20 of the lid 14.

The lid 14 has grasping arrangements 24, which enable the user to screw the lid 14 into the body 12.

The protrusion 13 is adapted to receive an elongate key as the apparatus 10 has been arranged that the diameter of the cylindrical portion of the body 12 be as small as possible.

As best seen in Fig 3, when the lid 14 is being screwed onto the body 12, the depending skirt 20 is seen to be screwed into between the flanges 18 and 19. The actual seal of the lid 14 to the body 12 is provided at the top portion 25 of the flange 18. The engagement of the slot 23 with the ribs 21, provide an additional seal. It is an important result of the seal that, when the lid 14 is screwed into the body 12, the air within the apparatus 10 is pressurized which provides additional sealing to the lid 14 to prevent water ingress.

The apparatus 10 is adapted to be installed into the surfboard 11 by means of a holesaw device 27. The holesaw device 27 has a main cutting blade 28 which cuts into the foam of the surfboard through the fibreglass skin. A further cutting blade 29 is used to cut a stepped arrangement where the flanges 18 and 19 are to be situated when installed. As seen from the drawings, the arrangement is formed by the different depths of cut of the two blades 28 and 29.

Once the holes have been made in the surfboard 11, the body 12 is inserted into the hole. The serrated ridges 17 bite into the foam of the surfboard to enhance the fit. The protrusion 13 which comes in a separate piece is fitted into the interior of the body 12 with its open end 13 fitting in an aperture 31 in the body 12. The open end is forced by manipulation into the foam to cut there into to form the space within the foam for the protrusion 13. The protrusion 13 is then withdrawn and the foam removed from the interior whereby it is then placed into the space formed by the first insertion with its

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closed end extending therefrom. The apparatus 10 is then preferably sealed into place by an epoxy resin or the like.

The apparatus 10 is then suitable for use whereby electronic keys are able to be inserted into the apparatus 10 and it is substantially stable within the surfboard 11 whereby the lid 14 protrudes only slightly above the surface of the surfboard 11. Naturally, the lid 14 can be substantially flush with the surface of the surfboard 11 if desired. It is seen that the protrusion 13 of the apparatus assists in the apparatus 10 from not dislodging from the surfboard 11 as it is effectively keyed into position.

The foregoing describes only some embodiments of the present invention and modifications obviously those sought in the art can be made thereto without departing from the scope of the present invention.

Throughout the specification, where the words "comprise" and its derivatives are intended to have an inclusive rather than an exclusive meaning unless the context requires otherwise.

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Dated this 13th day of June, 2003

Lance Edward Duke

By his Patent Attorneys

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